

Senedd Cymru
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Economi Gwyrdd
GE11
Ymateb gan: Sefydliad Safonau Prydeinig

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Welsh Parliament
Economy, Trade, and Rural Affairs Committee
Green Economy
GE11
Evidence from: British Standards Institution (BSI)



BSI response to the Economy, Trade and Rural Affairs Committee – Senedd Cymru

Green Economy

1. Introduction

BSI is the National Standards Body for the whole of the UK. We are responsible independently for preparing British Standards and for coordinating the input of UK experts to European and international standards committees.

BSI represents the UK view on standards in Europe via the European Standards Organizations CEN and CENELEC and internationally via ISO and IEC. BSI is a member of ETSI (The European Telecommunications Standards Institute) and provides support to government through their membership of ITU (the International Telecommunication Union).

In its role as the UK's National Standards Body, BSI provides the infrastructure for over 13,000 experts, who are the voice of UK economic and social interests, to be influential in the international standards organisations. BSI has a public interest responsibility to develop and maintain the standards infrastructure to support UK emerging industries at home and internationally.

We are pleased to contribute to the Welsh Parliament's Green Economy consultation. We believe Wales has a key contribution to make to the climate change policy agenda and BSI has the experience to facilitate further implementation of the Welsh Government's net zero strategy through standards.

BSI has contributed to several Welsh Government consultations on net zero in the last year and met with the Government to discuss how standards can contribute. We have outlined some of our activities in this response and would welcome the opportunity to provide further evidence to the committee. BSI believes that standards play a fundamental role in helping Wales achieve its goal of net zero emissions by 2050.

2. Standards and net zero

Standards provide knowledge, guidance, best practice, consistent and credible methodologies, and assessment techniques which can be used by organizations to implement and develop emissions lowering protocols and accelerate the transition to net zero. BSI has extensive experience in sustainability and energy standardization and maintains an extensive portfolio of climate-related standards including greenhouse gas management, climate change mitigation and adaptation, and investment in climate positive activities.

Our standards support the delivery of government policies and help industry meet regulatory requirements. BSI's strategic, innovation-driven, standardization programmes help drive market transformation and sustainable growth. Working across the energy sector, we deploy flexible standards development mechanisms to create best practice, keeping pace with fast-changing technology and commercial innovations.

BSI has published dedicated guidanceⁱ for organizations on net zero and is working on developing this into pathways for large businesses and SMEs to help them understand how standards will support their transition plans and accelerate their net zero ambitions.

BSI standards and standards programmes are supporting the deployment of energy smart appliances, the hydrogen economy, the Faraday battery challenge, smart cities, and electric and autonomous vehicles. We are supporting the Integrity Council for Voluntary Carbon Markets (ICVCM) develop Core Carbon Principles and the associated assessment methodologies. Further information on our Energy Services Appliances Programmeⁱⁱ and the Faraday Battery Challengeⁱⁱⁱ.

3. Answers to specific Committee Consultation questions

BSI would like to take the opportunity to answer the relevant questions posed by the Committee in relation to this consultation.

- ***What actions should the Welsh Government take to support development of Wales-based supply chains in green economy sectors?***

Standards can be an efficient tool to support development of Wales-based supply chains; they support market based innovation and regulation to deliver agile governance that can meet policy objectives. Some examples are below:

- Standards can **support and foster innovation in green economy sectors as our research has shown that standards can drive transformative innovation.**^{iv} For example, ISO 30500 – a standard for the design and testing of off-grid sanitation systems, was developed before a product was in the market and set out requirements for a technology that did not yet exist. This helped the market overcome the lack of globally consistent requirements around off-grid sanitation solutions, which was a critical barrier to innovation. The availability of this standard meant the market could then innovate to meet the benchmarks and requirements set out by the standard, fostering innovation across a crucial aspect of health and sanitation. In this way, Standards can define requirements for development of new processes, and have the capacity to support transformative innovation in any sector, helping to meet current global challenges such as climate change through supporting innovation. By setting out requirements that are globally relevant, consistent and consensus based, standards can be a flexible tool to help policymakers to deliver their innovation objectives. We would support close collaboration and engagement with the Welsh Government to find opportunities on supporting innovation through an approach that looks at standards, policy, and regulation as a system.
- **Standards and regulation are a useful tool for creating a level-playing field across sectors.**^v Thus, standards can help the economy expand and transform while fostering best practice. In particular standards can do so by providing principles and overarching guidance¹ that can be used in multiple contexts, including within regional and local contexts that can still meet national international policy goals.
- **Supporting sustained economic growth** – Standards are tools that regulators can use to minimise regulatory burdens and promote innovation. For example, the PAGIT report highlights a framework for standards and regulation to work together to support innovation.^{vi} The framework considers the needs of innovative technologies while supporting the long-term governance required in later stages of a technology development and usage. The report highlights that standards can support regulation at all technology readiness levels (TRL) and can work alongside regulation to provide agile governance mechanisms in the technology innovation process and regulatory decision-making.
- ***What will workers and employers need for a just transition to a Net Zero economy to be achieved, and what actions should the Welsh Government take to deliver the elements of this that lie within its devolved powers?***
- Workers and employees will need adequate and reliable policies to achieve a just transition to a Net Zero economy. Standards can act as a tool to provide these by building a consensus on best practice guidance and recommendations.
- **ISO Net Zero Guidelines – The ISO Net Zero Guidelines harmonises current international best practice on credible net zero action and governance and provides guidance on all stages of net zero action – from planning, implementation, through to tracking of progress to net zero.**^{vii} The Guidelines cover each stage of net zero action, from preparation and target setting to fair share, reporting and wider impact including on nature and biodiversity. The Guidelines were designed to

be accessible, and can be used by any organisation, in any jurisdictions. Policymakers can use the ISO Net Zero Guidelines as a tool to develop consistent systems-based strategies and policies, aligned to current best practice, to deliver their policy goals on net zero, to enable an effective and interoperable net zero transition across the economy. The development of the Guidelines were spearheaded by BSI in the international consensus-based standards development system of the International Organisation for Standardisation (ISO) with over 1200 participants from more than 100 countries. The Guidelines can help governments establish roles and responsibilities across both public and private sectors as well providing guidance on delivering and monitoring these commitments. To support inclusion of a just transition within the green economy ambitions, we highlight the ISO Net Zero Guidelines as a knowledge resource that the Welsh Government can utilize to deliver a net zero economy. ***We attach alongside this response a toolkit developed on the ISO Net Zero guidelines for policymakers.***

- **Just Transition** – On just transition considerations, the current international consensus captured within **the ISO Net Zero Guidelines which highlights equity and justice** (Section 5.9, Section 12) as a key guiding principle for delivering net zero, including taking a human-centred approach and safeguarding the rights of the most vulnerable people and communities as well as preserving ecosystems and biodiversity, aligning to the UN’s Sustainable Development Goals. For example, to ensure a just transition and determining what fair share is, the guidance highlights the need to consider context within resources and technology, historical GHG emissions, considering the impact of climate change and mitigation on vulnerable populations as well as the need for adaptation measures and finance supporting communities most affected by climate change. The guidance set out within the Guidelines can provide the Welsh government with the current international consensus and best practice on just transition, that could be utilised in any policy objectives around the green economy and net zero.
- **Scaling and Accountability of climate, net zero and green governance** – The challenge of scaling accountability globally requires a consistent approach to ensure interoperability of accountability requirements and frameworks across the economy, to be able to deliver a globally consistent and credible net zero transition. This is extremely relevant in the context of the ambitions of the Welsh Government’s green economy plans. **Standards and the wider Quality Infrastructure (conformity assessment, accreditation, measurement)^{viii} already delivers accountability and trust in products and services. This ecosystem can be a tool that supports the government’s objective and outcomes around climate, as standards are developed to provide globally consistent requirements around processes or products, while catering to contextual needs (e.g. regional needs), allowing interoperability across sectors and jurisdictions, underpinning global trade and economic cooperation.** Standards can do this by being principles based so that best practise can be applied in any context, such as in the context of devolved powers. At BSI, we continue to develop thinking on how standards and associated infrastructure such as conformity assessment, measurement and accreditation, together called Quality Infrastructure, can help both businesses and policymakers (including regulators) deliver their net zero and climate goals necessary for any green economy. Please see our attached infographic. **We would be delighted to speak further with the Committee and Welsh Government on how this Quality Infrastructure system could help deliver policy goals.**
- ***How will the Welsh Government need to work in partnership with others to realise the potential of the green economy and deliver a just transition? To what extent is the partnership working that is needed being undertaken?***
- We have advised the Welsh Government to work with BSI as the national standards body for Wales and the rest of the UK to achieve net zero in Wales by 2050. **Standards offer the ability to support public policy developments and regulation, or an alternative to regulation.** Therefore, BSI could offer: -
 - **Collaboration** – BSI is a global and national convenor on net zero and can provide advice and assistance on net zero where required. The BSI secretariat for the Our 2050 World collaboration

convened over 1200+ organizations and individual experts from over 100+ countries to develop the ISO Net Zero Guidelines in a joint collaborative endeavor, including major net zero actors such as the Greenhouse Gas Protocol, WWF International, World Business Council for Sustainable Development, Science Based Targets Initiative (SBTi), the Carbon Disclosure Project (CDP), C40 Cities and others, in addition to major businesses including Google, Meta and Amazon. This work has been recognized by the UN, including the UN High Level Climate Change Champion for the UK, COP26, Nigel Topping who personally launched the Guidelines at COP27. Recently, BSI joined the Transition Plan Taskforce (TPT)^{ix}, where we are assisting the TPT achieve its goals for firms transition plans for net zero and to make the UK a net-zero aligned financial center. BSI is participating in Workstream 1, where we are looking to provide a platform and advice on consensus building, governance and process to ensure the new standard is robust, follows best practice, aligns with other business standards and can be deployed and maintained in an enduring manner in the market to achieve maximum impact. **Within the Welsh context, we are aware the Well-being of Future Generations Act, requires the Welsh Government to consider the long-term impact to decision making. Alongside the legal net zero target by 2050 in Wales, BSI can provide information and collaboration to the Welsh Government's relevant net zero working groups as required.**

- **Global Leadership** - BSI is the global convener for the Our 2050 World^x collaboration between ISO, the UN Race to Zero campaign and the UNFCCC Global Innovation Hub. BSI has approached the Welsh Government to participate in the Our 2050 World, enabling Welsh engagement with this global initiative seeking to address the urgent climate challenge through the convening power of standards. The Net Zero Guidelines can help engagement with the Welsh public and in procurement policy, especially with the current passage of the Social Partnership and Procurement Bill in Wales. A key deliverable of Our 2050 World is the creation of the Net Zero Guidelines to reduce fragmented approaches to net zero and harmonize the net zero landscape. These Guidelines were launched at COP27 and offer the world a single core reference text for net zero to support actors and organizations at all levels, including those who develop policies, frameworks, standards or other initiatives on net zero for use by others. **These guidelines can help the Welsh Government ensure its net zero guidance for Welsh businesses, NGOs and other organizations reflect global consensus on net zero credibility and support Welsh organizations and consumers to address greenwashing and confusion around what net zero guidance and standards they should use. This document can also be used to engage the Welsh public on climate change, and we would be pleased to assist with this process.**
- **Convening:** One of the newly developed initiatives at BSI is the creation of the Sustainability Standards Network. The aim is to enable greater participation of experts from the environmental and public sustainability sectors in standards development activities. BSI would welcome involvement from Welsh stakeholders in this group, as a key part of facilitating best practice which can be shared with the public. **The Sustainability Standards Network** brings together like-minded individuals and organizations with a common purpose, delivering the UN's Sustainable Development Goals. Working with BSI Standard-makers we express action in new ways with new audiences and deliver best practice guidance to make life better. **As the Welsh Government has noted in its own consultations the need for collaboration, the involvement of Welsh stakeholders in this group would be most welcome.**
- ***How will the Welsh Government need to work in partnership with others to realise the potential of the green economy and deliver a just transition? To what extent is the partnership working that is needed being undertaken?***
- **One activity that we have engaged the Welsh Government on is the Nature Investments Standards programme.**
- BSI is working with Defra and industry, to deliver a nature investment standards programme. This will support markets for ecosystem services in the UK. We will work with a wide spectrum of public body, land management, environmental and financial stakeholders. The programme will cover the full range

of nature solutions and will include a framework for investment standards. This will provide rigour across the wider system of nature recovery related standards. We would welcome the Welsh Government to participate in this programme if of interest.

- **The key objectives of the programme are to:**
 - Enable scaling up of high integrity markets that trade in ecosystem services to support the flow of private sector investment into nature
 - Build trust and confidence for all market participants by guarding against greenwashing
 - Drive nature's recovery and accelerate progress on environmental goals including net zero and reversing biodiversity loss
 - Empower regulators and other expert bodies to engage with and support the development of markets that are robust, transparent, and fair
- **BSI is leading on climate change standards both nationally and globally^{xi}, we believe the following will be beneficial to Wales and the Welsh Government's policy work that will aid a just transition. We have engaged with the Welsh Government on these standards, but we believe the government should consider closer partnership with BSI to maximise its transition to a net zero economy in Wales.**
- **In addition to the Net Zero guidelines other standards within the National Catalogue that can assist the Welsh Government in its path to net zero include: -**
 - **Carbon Neutrality (ISO 14068)**, ISO 14068 provides principles, requirements, and guidance for achieving and demonstrating carbon neutrality. It focuses on quantifying, reducing, and offsetting carbon footprints, utilizing a hierarchical approach prioritizing direct and indirect GHG emission reductions and removal enhancements within the value chain over offsetting.
 - A new global standard for guidelines for using ISO 14001 to address environmental aspects and conditions within **Climate (ISO 14002-3)**.^{xii} This is led by a UK project leader and aims to bring together the various climate standards and initiatives, like the SBT and TCFD, under one standard to help the public navigate this confusing landscape.
 - A proposed new global standard to address guidelines for using ISO 14001 to address environmental aspects and conditions within **Resources and waste (ISO 14002-4 to be approved in ISO)**. This is proposed and led by the UK.
 - The UK is leading the global project for the **quantification and reporting of greenhouse gas emissions arising from transport chain operations (ISO 14083)**.^{xiii} This is an impactful standard that enables a common reporting methodology for quantifying and reporting GHG emissions from passenger and freight transport. It covers all modes of transport across air, land, and water, all means of transport, and is applicable at all stages along the entire transport chain. This will publish in Q1 2023.
 - The UK is leading on the global project for **Biodiversity Net Gain (ISO 17620)**.^{xiv} BSI is also planning national outreach events next year to help local council authorities across the UK achieve BNG using the British Standard, ahead of the Environment Act 2021 making biodiversity net gain mandatory, which is expected to be by November 2023. We'd especially want to collaborate with the Welsh government and Welsh local authorities to help them achieve BNG.

- A proposed new global standard on **Natural Capital Accounting**. Proposed ISO project (to be approved in ISO) will be convened and supported by the UK. This is based on the British Standard BS 8632. A key challenge is that nature is complex. Understanding our impacts and dependencies on it and how these affect us is even more so: for example, how pollution of the local water source results in increased costs of water supply, as well as killing fish species, limiting our recreational opportunities, and affecting human health. A specific aim of natural capital accounting is to reduce this complexity by collating all the data in one place and presenting it in formats that are familiar and meaningful for decision makers. Data that is inputted to natural capital accounting includes environmental data on the quality and quantity of natural capital stocks, changes in such stocks, and provision of the flows of benefits that may be financial, social, environmental, or human health and wellbeing. This information can help organizations identify which impacts and dependencies are material for their organization and nature; what changes may be necessary to their business model / economic activity to ensure their natural asset base is sustained; and enables them to communicate this information with their internal and external stakeholders, including their investors.
- BSI is also active in connecting with external industry initiatives and responding to industry consultations. For example, BSI has responded to each version of the TNFD framework to ensure alignment with the Natural Capital Accounting British Standard.

Key published adaptation to climate change standards:

- BS 8631:2021^{xv} Adaptation to climate change. Using **adaptation pathways for decision making** guide. This enables organizations identify the risks and opportunities of the current climate conditions, as well as plan for future changes. It outlines how organizations can choose the best adaptive pathway to minimize the risks and reduce the uncertainty of future climate change scenarios.
- BSI has supported the external guidelines on '**Climate Services** - Principles, requirements, and guidelines', which was written as part of the UK's Climate Resilience Programme in collaboration with the UK Met Office and BEIS.

Emissions Reporting and Verification

BSI has already developed a range of relevant standards that have potential for wider application:

- Life Cycle Assessment approaches and standards (e.g. ISO 14040, 14044).
- Greenhouse gas accounting methodologies and protocol standards (e.g. ISO 14044, 14064 (-1 emissions quantification at an organisational level and -2 assessment), 14067 (emissions quantification at a product level)).
- **PAS 2050** (lifecycle greenhouse gas emissions of goods and services), GHG Protocol – covers project and product standards, etc., with the purpose of informing investment and policy decisions around hydrogen production, and to enable CO₂ assessments and comparisons of different hydrogen production approaches and technologies.
- **PAS 2060** (demonstration of carbon neutrality). This assists companies to demonstrate the carbon neutrality of their respective products or activities, underpinning reliable and credible claims for them to be considered low carbon or carbon neutral, and providing confidence to consumers wishing to choose greener products. When standards are developed for voluntary use, different forms of verification can be outlined as part of these, including self-declaration and/or reporting, peer review, or independent third-party certification.

- **ISO 14020** (Environmental labels and declarations) provides examples of how best to achieve assurance, verification and validation, which should be supported and referenced in any future hydrogen standard.

We look forward to assisting the Committee with its inquiry further and please do not hesitate to contact BSI for further information.

Robert Jervis-Gibbons

Government Engagement Manager – Wales

6 March 2024

ⁱ BSI Net Zero - <https://www.bsigroup.com/en-GB/topics/sustainable-resilience/net-zero/>

ⁱⁱ <https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/>

ⁱⁱⁱ <https://www.bsigroup.com/en-GB/industries-and-sectors/energy-and-utilities/faraday-battery-challenge/>

^{iv} BSI research on Maximizing the impact of standards and regulation to drive transformative innovation: a new approach: https://our2050.world/wp-content/uploads/2023/07/Maximizing-the-impact-of-standards-and-regulation-to-drive-transformative-innovation_Final-Version_V1_0.pdf

^v HLEG Report "Integrity Matters" - v1 | United Nations

^{vi} [Proportionate and Adaptive Governance of Innovative Technologies \(PAGIT\): A Framework to Guide Policy and Regulatory Decision Making](https://www.gov.uk/government/consultations/proportionate-and-adaptive-governance-of-innovative-technologies-pagit)

^{vii} ISO Net Zero Guidelines: <https://www.iso.org/netzero>

^{viii} [The UK's National Quality Infrastructure - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/the-uk-national-quality-infrastructure)

^{ix} Transition Plan Taskforce - <https://transitiontaskforce.net/>

^x Our 2050 World <https://our2050.world/>

^{xi} <https://www.bsigroup.com/en-GB/topics/sustainable-resilience/net-zero/>

^{xii} <https://www.iso.org/standard/85365.html>

^{xiii} <https://www.iso.org/standard/78864.html>

^{xiv} <https://www.iso.org/standard/84992.html>

^{xv} <https://www.en-standard.eu/bs-8631-2021-adaptation-to-climate-change-using-adaptation-pathways-for-decision-making-guide/>

Policymakers Toolkit

To support policymakers to develop and deliver consistent globally-aligned net zero policies, driving greater alignment across the economy



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Introduction and purpose

What are the ISO Net Zero Guidelines?

The ISO Net Zero Guidelines harmonises current international best practice on credible net zero action and governance, and provides guidance on all stages of net zero action – from planning, implementation, through to tracking of progress to net zero. The Guidelines were designed to be accessible, and can be used by any organisation, in any jurisdictions.



Purpose of this Toolkit:

The Guidelines are already designed to be accessible to enable use within existing strategies and approaches to net zero delivery.

This toolkit sets out recommendations and guidance specifically for policymakers to enable efficient use of the ISO Net Zero Guidelines to develop and implement consistent net zero policies in any sector or jurisdiction.

Who can use this toolkit?

This toolkit is designed primarily as a resource for policymakers which includes, but is not limited to, national government, cities and regional governments, regulators, government advisory bodies, and other public sector organisations.

What does this toolkit cover?

- The toolkit sets out what the ISO Net Zero Guidelines are, and how they bring together current consensus on net zero governance to drive greater coherence and alignment.
- The toolkit sets out how the Guidelines can help design consistent policies aligned to the Paris Agreement, develop frameworks for accountability which take a systems view, and consider wider interdependencies across the economy, making policies on the net zero transition work for all.
- The most relevant section of the ISO Net Zero Guidelines for policymakers are highlighted in this toolkit.
- There are links to further resources for developing policy aligned to global best practice.

Key recommendations for using ISO Net Zero Guidelines in policymaking

- Policymakers can use the ISO Net Zero Guidelines as a tool to develop **consistent systems-based policies, aligned to current best practice**, to deliver their policy goals on net zero, to enable an effective net zero transition across the economy.
- Policymakers can use the ISO Net Zero guidelines to set out **clear roles and accountability responsibilities** for those delivering policies, such as regulators, to ensure net zero progress can be monitored, verified and delivered credibly.
- For further guidance on using standards in policy, policymakers can **engage with their National Standard Bodies and Accreditation bodies on net zero standards and accreditation services**, to develop and deliver credible accountability frameworks aligned to international consensus on best practice.

Specifically, the Guidelines can help:

- 1. Central National Government departments** to develop globally aligned policies to deliver their commitments on the net zero transition across all sectors, and set out roles and responsibilities across the public and private sector to deliver and monitor progress to those commitments.
- 2. Regional and City Level governments** to develop and deliver net zero strategies aligned to regional and national commitments, and international best practice.
- 3. Regulators** to develop accountability frameworks aligned to global best practice that can assess credible net zero claims, and deliver interoperability in tracking progress to net zero across the economy.
- 4. Publicly owned organisations** to develop and deliver their net zero strategies, aligned to regional and national net zero commitments, and international best practice.
- 5. Advisory bodies** to inform recommendations on mitigation actions on key gaps that should be mitigated by policymakers.

What are the ISO Net Zero Guidelines?

The ISO Net Zero Guidelines are a tool for creating policies to credibly measure progress to and deliver net zero across the economy in any jurisdiction.

The Guidelines draw on the existing landscape of prominent net zero standards and frameworks to harmonise best practice for planning and delivering net zero in one place.

The Guidelines were developed within the consensus based system of the International Organisation for Standardisation (ISO), involving 1200+ participants from 100+ countries.

The Guidelines were launched at COP27 and are freely accessible at <https://www.iso.org/netzero>.

They have been downloaded by thousands of users from more than 160 countries.



1200+ participants
from 100+ countries



Freely accessible in
multiple languages



Downloaded in over
160 countries



Key reading material:

[ISO Net Zero Guidelines >](https://www.iso.org/netzero)

Why were the Guidelines developed?

The term “net zero” is well understood at a global level, but how organizations contribute to achieving this global net zero target remains confusing for many. Initiatives and frameworks are popping up all over the world and governments, businesses and cities continue to grapple with this fast evolving and increasingly crowded landscape.

The ISO Net Zero Guidelines were designed to bring clarity and alignment to this fragmented net zero governance landscape by providing a single set of guidelines that provide a complete framework of the entire net zero journey – from planning, implementation to tracking of progress.

The Guidelines go beyond the stages of net zero action that often receive the most profile, such as target setting and reporting, and detail the key considerations and recommendations that must be considered in not just planning for, but delivering and monitoring progress to net zero.

Notably, the Guidelines were independently analysed by the Carbon Trust following their launch at [COP27](#) and found to be strongly aligned with all ten recommendations from the UN Secretary General’s report on net zero integrity and addressing greenwashing, the [UN Integrity Matters report \(2022\)](#).



Key reading material:

[A comparison of Net Zero guidance from COP27 >](#)
[UN Integrity Matters Report \(2022\) >](#)

Who can use the ISO Net Zero Guidelines?

The ISO Net Zero Guidelines are designed as a tool to be used by all types of organizations at the national, regional, and individual organization level to enable a common, global approach to achieving net zero.

The Guidelines distinguishes between two types of users, for which it provides guidance: 'governance organizations' and 'organizations'. Governance organizations are defined as 'organization that decides, manages, implements and/or monitors policies, requirements, legislation or guidelines'.

Policymakers fall under this umbrella of 'governance organizations' as they are the 'rule-setters' for the net zero space.



Non-State Actors (e.g. businesses)

Informing a strategy for their entire net zero journey, from planning, implementation through to tracking progress



Orchestration Campaigns on net zero governance

Setting requirements that members should align to, to demonstrate progress to net zero



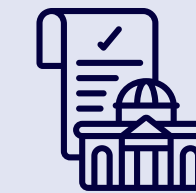
Public sector bodies (e.g. publicly owned transport company)

Developing their own net zero strategy and delivery plans, and monitoring progress



Cities and regional governments

Developing policy and accountability based on global best practice for any sector transition to net zero



National Governments

Developing policy and accountability framework based on global best practice for any sector transition to net zero



Regulators (e.g. electricity regulator)

Developing detailed requirements for monitoring, reporting and verification of progress to net zero

Using the Guidelines to de-risk policy and deliver net zero

To help 'rule-setters' like policymakers to use the ISO Net Zero Guidelines effectively, they have been written in such a way that the guidance and recommendations can be integrated into existing approaches to strategy and policy design, development and implementation.

The Guidelines provide a framework to guide design and delivery of net zero policy for all stages of net zero action, aligned to the current globally harmonised best practice on net zero.



Taking a systems approach

The Guidelines harmonise what ‘good net zero’ looks like, while considering sectoral, regional, societal, economic, and environmental needs, and interoperability with other sectors.

The ISO Net Zero Guidelines set out **10 guiding principles** which represent the **crucial sector-agnostic risks** around meeting net zero and are the basis for the guidance and recommendations set out within the Guidelines.

The principles include urgency to reduce emissions, transparency, global alignment, and equity, among others. These guiding principles were developed based on analysis of the current net zero best practices and consensus from over 1200 participants from more than 100 countries.

This principles-based approach enables the Guidelines to provide a systems approach to policymaking, helping to identify impacts and ensure interoperability of policies across the economy.

The Guidelines can help policymakers test how their net zero policies have considered the wider impacts on national and regional needs, sectoral needs, societal needs and ecosystem services.

For example, the principle on alignment highlights the need to align policies to the goals of the Paris Agreement, which is then reflected within guidance on setting targets and planning mitigation options. This can help policymakers align their policy goals and strategies to their Nationally Determined Contributions (NDC’s) and associated delivery of carbon budgets, linking in regional and national policymaking to globally agreed targets to meet net zero.



Key reading material:

[Section 5 of ISO Net Zero Guidelines >](#)
[Mapping the net zero voluntary initiative landscape >](#)

ISO Net Zero Guideline' Guiding Principles to de-risk the delivery of net zero

The detailed principles can be found in Section 5 of the ISO Net Zero Guidelines and the below provides a short summary of each principle.

01 Alignment

Helps align policies and guidance to best practice, to support meeting the goals of the Paris Agreement.

02 Urgency

Helps develop and implement policies which can contribute to limiting the increase in the average temperature to 1.5C° above pre-industrial levels, to reach net zero by 2050.

03 Ambition

Helps set out targets and delivery pathways to achieve net zero emissions as early as possible, including guidance for ambitious action.

04 Prioritization

Helps to set out guidance prioritising reduction of greenhouse gas emissions, with removals used after all possible emissions reduction actions have been taken.

05 Decision-making based on evidence

Ensures the evidence to decision-making related to net zero delivery considers the latest scientific and indigenous knowledge, and adapts to deliver a just transition.

06 Risk-based approach

Helps take a risk-based approach to climate change mitigation actions required. This helps policymakers make evidence-based decisions.

07 Credibility

Sets out requirements to ensure credibility of actions, including verifiability using internationally accepted accounting standards.

08 Equity and justice

Helps align policymaking to The UN's Sustainable Development Goals (SDG's) to support equity and global transition to net zero, taking a human-centred approach.

09 Transparency, integrity and accountability

Sets out requirements and guidance to ensure information on progress and plans are publicly reported, with independent monitoring and verification.

10 Achievement & continuation of net zero

Policy design and implementation at all levels considers equity and justice, including fair share, and looks to take action towards achieving net zero.

Aligning policy design to global consensus on net zero best practice

The Guidelines are a versatile tool that have been designed with input from more than 100 countries to be applicable across all jurisdictions and actors, allowing policymakers to make nationally and regionally relevant policies to deliver a net zero transition in any sector.

The Guidelines can help policymakers consider how best to set ambitious targets which take a systems approach to consider sectoral, regional, economic, societal and environmental needs.

Policymakers can use the Guidelines as a tool to develop robust policies on net zero target setting ([Section 8](#)), mitigation ([Section 9](#)), and residual emissions and criteria for use of removals ([Section 10](#)) to be able to deliver their commitments to reach net zero, aligned to global best practices and the Paris Agreement.

For instance, the consensus is clear that direct reduction of emissions is urgently required. The Guidelines set out guidance to prioritise such direct reduction and criteria for credible use of high-integrity offsets that can counterbalance residual emissions, in line with a science-based pathway for emissions reductions.



Key reading material:

[Section 8 of ISO Net Zero Guidelines](#) >
[Section 9 of ISO Net Zero Guidelines](#) >
[Section 10 of ISO Net Zero Guidelines](#) >

Enabling effective accountability frameworks

The Guidelines provide a framework to set out boundaries, leadership, roles and responsibilities ([Sections 6 & 7](#)) which can be used by policymakers to set out clear and aligned responsibilities in policy and related regulatory frameworks to enable coordination across public and private sector organisations delivering net zero across the economy.

The Guidelines can support policymakers to consider how the sector-specific or regional mandates of different regulatory bodies link with, or contribute to, national oversight of net zero. For instance, regional regulators within a limited jurisdiction may require different mandates to deliver their sector-specific commitments, but will still need to align with the national net zero or climate change regulators to ensure consistent progress to net zero across the economy.

Achieving net zero requires all parts of the economy to collaborate. Developing policies which set out clear and complementary responsibilities for different actors delivering policies to achieve net zero will ensure interoperability across different functions. This can ultimately provide policymakers with clearer oversight of net zero delivery across multiple sectors across the economy.

Setting out aligned responsibilities, incentives and mandates will also support policy delivery organisations, such as regulators and the private sector, to deliver consistent outcomes, and support them to fulfil their monitoring and regulatory functions more effectively in the transition to net zero across the economy.



Key reading material:

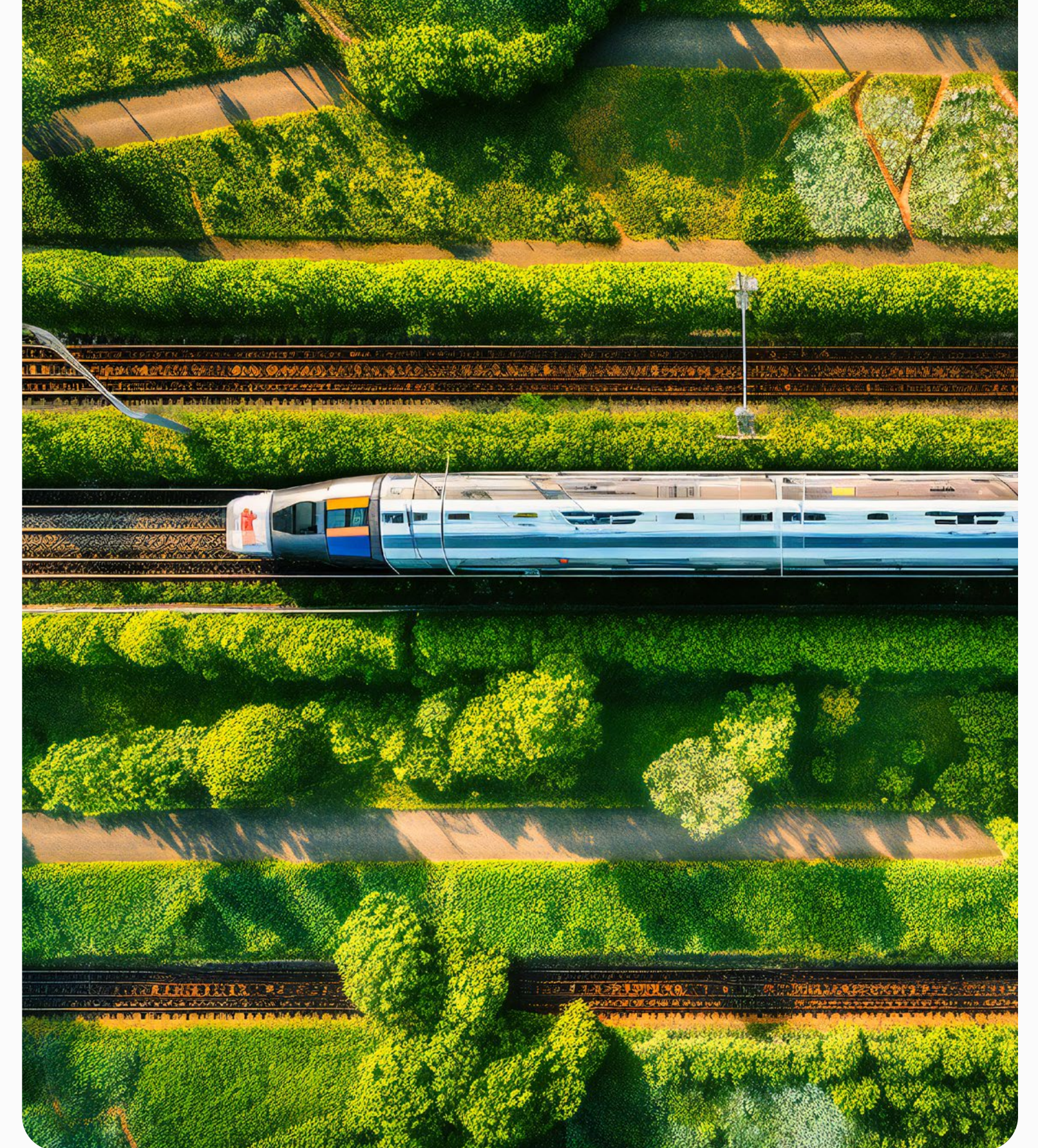
[Section 6 of ISO Net Zero Guidelines >](#)
[Section 7 of ISO Net Zero Guidelines >](#)

Aligning monitoring and enforcement with global best practice

Developing accountability frameworks that can deliver the monitoring, reporting and verification requirements for credible net zero progress is essential to ensuring national and international commitments on climate action can be met.

The Guidelines provide policymakers with an accessible framework to develop effective measurement, monitoring ([Section 11](#)), reporting, and transparency ([Section 13](#)) requirements for any net zero transition within any sector.

For instance, the Guidelines can help policymakers set out the overarching scope and requirements of reporting. This criteria covers key aspects of net zero action that need to be tracked to assess progress against policy goals and, to support this oversight, can provide policymakers with the optimal frequency, coverage and type of data needed to assess credible progress to net zero.



Key reading material:

[Section 11 of ISO Net Zero Guidelines >](#)
[Section 13 of ISO Net Zero Guidelines >](#)

From commitment to implementation and tracking

The ISO Net Zero Guidelines support a systems approach across the range of actions required to meet net zero.

7 elements of net zero action covered by the ISO Net Zero Guidelines.



Prepare

Sets out **guidance for efficiently delivering against your net zero commitment**, such as incorporating net zero as a priority into internal governance documents, and getting buy in from across your organisation.



Measure

Consider how **policies can be designed to account for all greenhouse gas emissions** (not just carbon dioxide) and include all scopes of emissions, establishing a credible baseline.



Target

Sets out how **science-based targets** can be appropriately set, while considering sectoral and regional needs.



Reduce

Prioritise **mechanisms to ensure emissions reductions**, such as transitioning away from fossil fuels.



Remove

Set out **requirements for high-quality removals** to counterbalance residual emissions, such as permanent or sufficiently long-term carbon storage comparable to the lifetime of GHG emissions.



Report

Consider what **good reporting** looks like, including making data publicly accessible, and considering how to ensure limitations of data are highlighted appropriately.



Impact

Consider **impact of net zero policies across the economy**, such as on nature, biodiversity and society, aligned to the United Nation Sustainable Development Goals.

How are these elements crucial for policymaking?



Prepare

Develop **any policy through a net zero lens**, beginning from the options analyses, designing through to implementation, using the net zero guiding principles set out by the ISO Net Zero Guidelines.

Sections 5, 6, 7 of Net Zero Guidelines



Measure

Understanding **boundaries of measurement** and how roles and responsibilities should be set up to ensure aligned and credible carbon inventories.

Sections 6, 11 of Net Zero Guidelines



Target

Develop **policies aligned to science based targets** in line with the Paris Agreement, have interim targets (or milestones), and include iterative stages in policy making to adapt as knowledge and best practice evolves.

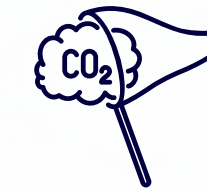
Section 8 of Net Zero Guidelines



Reduce

To meet **national targets on emissions reductions**, ensuring emissions reduction is prioritised in policies across the economy, taking into account sector specific needs.

Section 9 of Net Zero Guidelines



Remove

Using the **guidance to help build incentives** to scale early investments in high quality removals to support achievement of net zero targets.

Section 10 of Net Zero Guidelines



Report

Develop **transparent and accessible data repositories** to show credible progress to net zero, and build trust with all actors in the net zero transition, including the general public.

Sections 11, 13 of Net Zero Guidelines



Impact

Take a **systems approach to delivering the net zero transition** across the economy, including creating aligned responsibilities across different actors to ensure interoperability of policies, and maximise benefits for environment and society.

Sections 12, 14 of Net Zero Guidelines

Supporting policy objectives across the economy

Policymakers act as the 'rule-setters' for other organisations to comply with. However, different policymakers have different roles and responsibilities within the net zero transition and therefore, their policy objectives and goals will vary across the policy landscape and across the economy.

For instance, the needs of a national government department when developing climate change mitigation policies may be different to a city or regional level government's needs. It is crucial that sectoral and regional policymaking needs can be assessed and incorporated into national policy development, implementation and tracking, to prevent disconnected policy delivery, double counting or duplication of resources.

The principles based nature of the ISO Net Zero Guidelines, supported by recommendations, means they are a versatile policy development tool that can be used to deliver any policy objective aligned to best practice on net zero.

The Guidelines can be used as a framework to understand what good net zero looks like in any policy or regulatory context. Further insight into how the Guidelines can help in your policy context is provided on the next page.



Supporting policy objectives across the economy



National government departments

The ISO Net Zero Guidelines are a toolkit to transpose a net zero lens onto existing policy development processes led by government departments at the national level. This means any government department can use the Guidelines as a tool within their own sectoral policies to ensure alignment to global best practice on net zero and support swift uptake and achievement of policy objectives.

For instance, the Guidelines can provide a framework to test how a transport policy may deliver against regional and national decarbonisation commitments, while simultaneously delivering co-benefits for biodiversity, nature and society. This systems approach helps link sectoral needs across the economy, providing a clear framework to consider key interdependencies and governance oversight needed to align policies across the economy and deliver against national net zero targets.



Cities and Regional Policymakers

The Guidelines can provide a framework for city and regional level governments and authorities to develop and implement their net zero strategies based on global best practice.

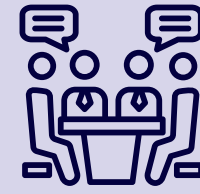
The Guidelines can aid delivery of regional net zero objectives in line with national net zero objectives, and also work as a standalone tool for regional authorities developing ambitious climate policies for their local context.



Regulators

The Guidelines contain guidance on what good reporting and tracking of progress looks like, and what is required to ensure a credible net zero claim. Regulators can use the Guidelines as a framework in any sector to develop approaches to monitoring and reporting of the net zero transition in their specific sectors, including considering the wider impacts of a just transition to net zero across the economy, society and the environment.

For instance, the Guidelines can be used by a waste regulator to develop a framework of requirements, including considering data limitations, to ensure the waste sector operators are demonstrating credible progress to net zero and making credible net zero claims.



Advisory bodies

The Guidelines harmonise what 'good net zero' looks like globally. They can inform recommendations on mitigation actions developed by an advisory body for policymakers to be able to deliver on their policy commitments around net zero.

The Guidelines are principle-based and flexible and can be a tool for advisory bodies to test potential recommendations and actions against the key guiding principles, to ensure recommendations take a systems approach and maximise benefits of net zero across the economy.



Publicly owned organisations

The Guidelines are a tool for publicly owned organisations, such public energy or transport companies, to develop and deliver their net zero strategy to be able to meet their net zero commitments and align against national net zero policies and targets, as well as international best practice.

For instance, a publicly owned water company can use the guidance set out within the Guidelines to develop and deliver their net zero strategy aligned to national climate commitments, while ensuring alignment to their sector specific requirements.

Suggested next steps:

1. Understand which stages of the net zero journey highlighted on [page 15](#) are most relevant for delivering your policy objectives.

2. Consider how the Guidelines can help you support your policy design to align to global best practice on net zero.

3. Trial the use of ISO Net Zero Guidelines as a framework to develop globally aligned policy. Your National Standard's Body can provide your team with further support on this.

4. Disseminate and highlight the ISO Net Zero Guidelines as a tool to relevant departments to develop policies that take a systems approach to net zero.



Further resources

1. Research on standards-policy interactions and how it can support innovation across the economy: [Our2050World Research >](#)

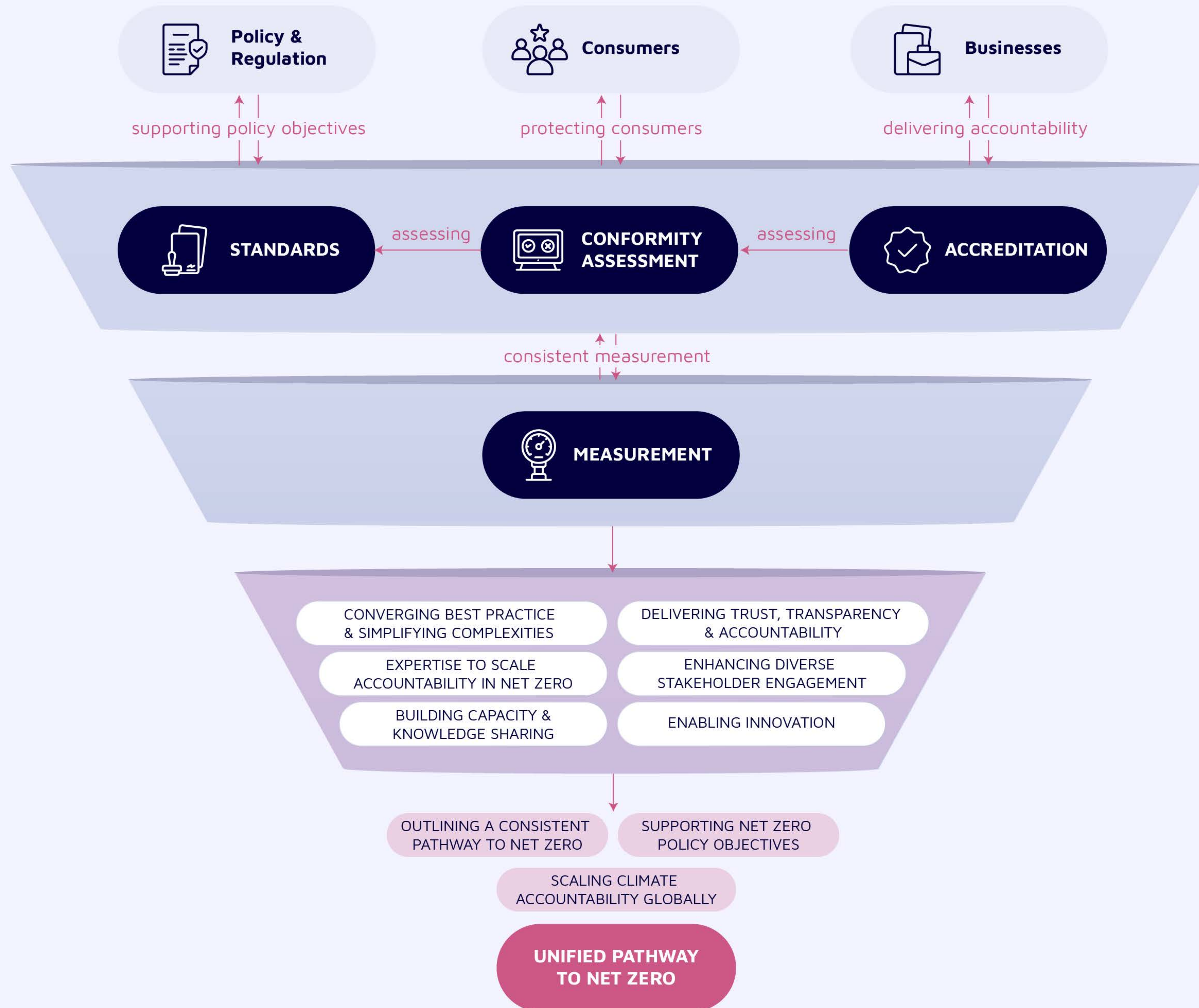
2. A toolkit aimed at National Standard's Bodies on standards and public policy: [ISO - Standards and public policy: a toolkit for national standards bodies >](#)

3. ISO's climate action toolkit with case studies: [ISO - Climate action toolkit: case studies >](#)

4. The Net Zero Stocktake from 2023 highlighting the current landscape of net zero action among businesses and governments: [Net Zero Stocktake 2023 | Net Zero Tracker >](#)



Quality Infrastructure: A Unified Path to Net Zero



Quality Infrastructure

- STANDARDS**
 Developing consensus on what 'good' looks like. Many countries have a National Standards Body. These national bodies coordinate with each other at international level.
- CONFORMITY ASSESSMENT**
 Assessing that standards are being met across global supply chains.
- ACCREDITATION**
 Ensuring confidence in conformity assessment. Many countries have a National Accreditation Body. These national bodies coordinate with each other at international level.
- MEASUREMENT**
 Ensuring consistent measurements and scientific calibration. Many countries have a National Metrology Body. These national bodies coordinate with each other at internal level.